

IN THE SPECIFICATION:

Please AMEND paragraph [0037] as follows:

[0037] The large-scale, discrete, off-board, components include one or more batteries 136, HV output capacitors 138, 140, and (optionally) housing mounted, patient alert sound transducers 129, coupled to patient alert driver circuitry 116, and/or activity sensors 134. The discrete components mounted to the PC board include telemetry antenna 36, reed switch 130 coupled to reed switch circuit 118, crystal 132 coupled to crystal oscillator circuit 120, a set of HV discrete components of the HV cardioversion/defibrillation output circuitry 108, and switching and protection circuit components of block 114. These discrete components are coupled to system IC 102 through other ICs and hybrid circuits incorporating the functional blocks 104-128 and 176 described further below. A similar ICD operating system to that depicted in FIG. 2 in which the present invention can be implemented is disclosed, for example, in the above-referenced '316 patent. The depicted functional blocks and discrete components of FIG. 2 can be arranged as part of one or two LV hybrid circuits, a HV hybrid circuit and a discrete component PC board. However, it will be understood that a single hybrid circuit could be employed that incorporates and supports all of the system ICs.

Please AMEND paragraph [0042] as follows:

[0042] Optionally, a patient alert driver circuit 466 116 is coupled to a sound emitting transducer 129, which is mounted adjacent to the interior surface of the IPG housing and is powered to emit audible warning signals, in high urgency and low urgency tones to alert the patient of VF detection and imminent delivery of a C/D shock or of events or conditions of concern warranting physician intervention. The warnings that can be programmed into operation or programmed "off" include pace/sense and CVWDEFIB lead impedance out of range (too high or too low), low battery voltage, excessive charge time for charging the HV capacitors, all regimens in a programmed group of regimens

exhausted for a given episode, and an indication of the number of shocks delivered in an episode["].

Please AMEND paragraph [0082] as follows:

[0082] If success is not achieved as determined in step S312, then a comparison of the current VT episode rate to the VT episode rate stored in step S302 is made in step S316 to determine whether the VT has accelerated or not. If VT acceleration is determined to have occurred in step S316, then the RCL_{Em} stored in step S308 is associated in step S318 with the delivered ATP regimen as having caused acceleration and stored in Table 3. The use of such a delivered ATP regimen causing acceleration to treat a future VT episode exhibiting the RCL_E associated with that delivered ATP regimen is avoided in accordance with one aspect of the present invention. The algorithm then advances to ~~step S330~~ step S340 to determine if a shock therapy should be delivered to terminate VT or successful ATP regimen be determined starting at a new baseline therapy (~~step S360 in FIG. 4B~~).

Please AMEND paragraph [0084] as follows:

[0084] If it is determined in step S320 that another ATP regimen is allowed, then a comparison is made between the most recent RCL_{mn} and the preceding RCL_{mn-1} measured for the same VT episode (~~step S324~~). If the RCL difference is greater than a threshold amount, RCL_{TH} , then a subsequent ATP regimen is delivered that simply has more number of pulses (from the n^{th} ATP) while maintaining the same aggressiveness (i.e. cycle length, CL) as the previously delivered ATP (~~step S326~~). Alternatively, if the RCL difference is less than the threshold value, the new ATP has same number of pulses but shorter CL by a programmable value ΔCL . Note that for the very first iteration when $n=1$ the RCL for the 0^{th} ATP regimen (i.e. exploratory sequence) and the baseline regimen are used to make decision to increment number of pulses or decrease CL for subsequently

delivered ATP either during that particular detection of that episode or during a later detection of the same VT (i.e. VT having same exploratory RCL signature).

Please AMEND paragraph [0085] as follows:

[0085] Then, steps S312 to S322 as described above are selectively repeated until one of step S312 or S316 is satisfied or it is determined in step S320 that no further ATP regimens can be delivered. In the latter case, the RCL_{mn} and RCL_{mn-1} are stored in Table 2 (step S322) and are carried over for use in the next detected episode of the same VT. Consequently Table 2 consists of n rows each of which corresponds to a unique VT by virtue of a characteristic RCL_{Em} . As explained above, the next two columns of the table store RCLs for the n^{th} and $n-1^{th}$ failed ATP attempt. The parameters for the n^{th} failed ATP regimen are stored in the last column and these ATP parameters are used to design ATP therapy for a subsequently detected episode of the same VT. The determination of whether a currently detected episode is same as one of the prestored VTs is made by comparing the exploratory RCL for the newly detected episode with RCL_{Es} already stored in the Table 2 (step S348 in FIG. 4B).